

DOCKET NO.: MSFT-3027/307008.01

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Jose A. Blakeley, et al.

Confirmation No.: Not Yet Assigned

Application No.: 10/775,982

Group Art Unit: 2171

Filing Date: February 10, 2004

Examiner: Not Yet Assigned

For: **SYSTEM AND METHOD FOR PROVIDING USER DEFINED
AGGREGATES IN A DATABASE SYSTEM**

DATE OF DEPOSIT: *Jan 27, 2005*

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REGISTRATION NO.: 37,711

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- ☒ In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of

the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- ☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).

- ☒ Copies of reference numbers **1 thru 22** listed on the attached Form PTO-1449 are enclosed herewith.

- ☒ Copies of reference numbers **23 thru 47** on the attached Form PTO 1449 are not required to be submitted pursuant to 37 CFR § 1.98(a)(2)(i).

- ☐ Copies of references - are not being submitted because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application number , filed for which a claim for priority under 35 U.S.C. § 120 has been made in the instant application.

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PATENT

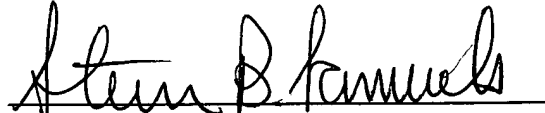
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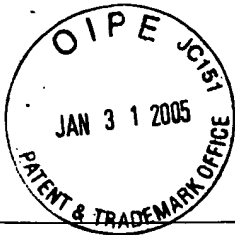
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Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. MSFT-3027/307008.01	Application No. 10/775,982
	Applicant Jose A. Blakeley, et al.	
	Filing Date February 10, 2004	Group 2171
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
1	Andrews, T. et al., "Combining Language and Database Advances in an Object-Oriented Development Environment", <i>OOPSLA Proceedings</i> , October 4-8, 1987 , 430-440	
2	Bhattacharya, S. et al., "Coordinating Backup/Recovery and Data Consistency Between Database and File Systems", <i>ACM SIGMOD</i> , June 4-6, 2002 , 500-511	
3	Biliris, A., "The Performance of Three Database Storage Structures for Managing Large Objects", <i>ACM SIGMOD</i> , 1992 , 276-285	
4	Buneman, P. et al., "Inheritance and Persistence in Database Programming Languages", <i>ACM</i> , 1986 , 4-15	
5	Hsiao, H.I. et al., "DLFM: A Transactional Resource Manager", <i>MOD</i> , 2000 , 518-528	
6	Khan, L. et al., "A Performance Evaluation of Storing XML Data in Relational Database Management Systems", <i>WIDM</i> , 2001 , 31-38	
7	Leontiev, Y. et al., "On Type Systems for Object-Oriented Database Programming Languages", <i>ACM Computing Surveys</i> , December 2002 , 34(4), 409-449	
8	Melton, J. et al., "SQL and Management of External Data", <i>SIGMOD Record</i> , March 2001 , 30(1), 70-77	
9	Papiani, M. et al., "A Distributed Scientific Data Archive Using the Web, XML and SQL/MED", <i>SIGMOD Record</i> , September 1999 , 28(3), 56-62	
10	Seshadri, P., "Enhanced Abstract Data Types in Object-Relational Databases", <i>The VLDB Journal</i> , 1998 , 7, 130-140	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
11	Varlamis, I. et al., "Bridging XML-Schema and Relational Databases. A System for Generating and Manipulating Relational Databases Using Valid XML Documents", <i>DocEng'OL</i> , November 9-10, 2001, 105-114	
12	Yoshikawa, M. et al., "XRel: A Path-Based Approach to Storage and Retrieval of XML Documents Using Relational Databases", <i>ACM Transactions on Internet Technology</i> , August 2001, 1(1), 110-141	
13	Findler, R.B. et al., "Contract Soundness for Object-Oriented Languages" <i>ACM Conference on Object-Oriented Programming Systems, Languages, and Applications, OOPSLA</i> , 2001, 15 pages	
14	Harrison, C.J. et al., "Structure Editors: User-Defined Type Values and Type Inference, <i>IEEE</i> , 2000, 241-247	
15	Michael Stonebraker, "Inclusion of New Types in Relational Data Base Systems", <i>IEEE International Conference on Data Engineering</i> , 1986, 1-19	
16	Berg, C., "How Do I Create Persistent Java Objects?", <i>Dr. Dobb's Journal</i> , 1997, 22(4), 98-101	
17	Chien, A.A., "Concurrent Aggregates (CA)-Design and Experience with a Concurrent Object-Oriented Language Based on Aggregates", <i>J. Parallel and Distributed Computing</i> , 1995, 25(2), 174-196	
18	Darby, C., "Object Serializatin in Java 1.1. Making Objects Persistent", <i>Web Techniques</i> , 1997, 2(9), 55, 58-59	
19	Frost., "Binary-Relational Storage Structures", <i>The Computer Journal</i> , 1982, 25(3), 358-367	
20	Fuh, Y-C. et al., "Implementation of SQL3 Structured Types with Inheritance and Value Substitutability", <i>Digital Symposium Collection</i> , 2000, Abstract Only, 2 pages	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	21	Haverlock, K., "Object Serialization, Java, and C++", <i>Dr. Dobbs. Journal</i> , 1998, 23(8), 32, 34, 36-37	
	22	King, et al., "TriStarp-An Investigation into the Implementation and Exploitation of Binary Relational Storage Structures", <i>Proc. 8 Suppl BNCOD(British National Conference on Data Bases)</i> , 1990, 64-84	
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U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	23	6,505,211	01/07/03	Dessloch, et al.	707	103Y
	24	6,199,100	03/06/01	Filepp, et al.	709	203
	25	6,223,344	04/24/01	Gerard, et al.	717	170
	26	6,708,196	03/16/04	Atkinson, et al.	718	102
	27	5,297,279	03/22/94	Bannon, et al.	707	103
	28	5,437,027	07/25/95	Bannon, et al.	395	600
	29	5,864,862	01/26/99	Kriens, et al.	707	103
	30	6,564,205	05/13/03	Iwata, et al.	707	2
	31	2002/0198891 A1	12/26/02	Li, et al.	707	102
	32	5,900,870	05/04/99	Malone, et al.	715	866

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO

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U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	33	6,047,291	04/04/00	Anderson, et al.	707	103
	34	6,112,024	08/29/00	Almond, et al.	717	122
	35	6,199,195	03/06/01	Goodwin, et al.	717	104
	36	6,338,056	01/08/02	Dessloch, et al.	707	2
	37	6,370,541	04/09/02	Chou, et al.	707	103
	38	6,519,597	02/11/03	Cheng, et al.	707	10
	39	6,556,983	04/29/03	Altschuler, et al.	706	55
	40	6,578,046	06/10/03	Chang, et al.	707	4
	41	6,772,178	08/03/04	Mandal, et al.	707	204
	42	6,108,004	08/22/00	Medl	715	804
	43	2002/0091702 A2	07/11/02	Mullins	707	100
	44	2002/0152422 A1	10/17/02	Sharma, et al.	714	13
	45	6,070,174	05/30/00	Starek, et al.	707	206
	46	6,671,687	12/30/03	Pederson, et al.	707	9
	47	6,785,690	08/31/04	Davidson	707	103Y

FOREIGN PATENT DOCUMENTS

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					YES	NO
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